

AMENDMENTS TO THE SPECIFICATION:

Replace the title on line 1 of page 1 with the following amended title:

~~SYSTEM FOR LOCATING GOLF BALLS~~

RF DETECTABLE GOLF BALL

Please add the following paragraph after the title.

Cross-Reference to Related Application

This application is a divisional of co-pending U.S. Serial No. 09/293,522, filed April 15, 1999, now U.S. Patent No. _____, which is incorporated herein by reference in its entirety.

Replace the paragraph beginning at line 1 on page 7 in its entirety with the following amended paragraph:

Although the prior art discloses a multitude of systems for locating a lost golf ball, all of the methods taught posses certain drawback. Thus, it is clear that there remains room for improvement. ~~What is needed therefore is a remote sensing golf ball location system of sufficiently low power consumption to be light weight and portable, and preferably hand held. In addition, such system should not compromise the integrity of the golf ball bounce and flight characteristics. Further, such a system should possess sufficient range to be of practical utility and such a system should be able to locate a golf ball regardless of the ball's physical orientation of the course or whether the ball is obscured by foilage.~~

Replace the paragraph beginning at line 10 on page 7 in its entirety with the following amended paragraph:

A golf ball including a passive transponder/inductor responsive to being swept by a source signal to emit a directional signal. ~~The present invention provides a system which may be employed for locating lost golf balls which includes a golf ball that incorporates an array of passive transponders and a radio frequency ("RF") transmitter/receiver capable of energizing the passive array and of detecting a signal emitted by the array. Each passive transponder is a capacitively loaded flat loop inductor of predetermined configuration. The array comprises three flat loop inductors arranged in a predetermined spatial relationship within the interior of a golf ball. Each flat loop inductor functions as a tuned LC circuit that is charged by the RF transmitter/receiver and emits a radio frequency signal, detectable by the transmitter/receiver, for a finite period of time after the RF transmitter/receiver is turned off.~~

Delete the paragraph beginning at line 1 on page 8 in its entirety:

~~It should be noted that the present invention does not utilize radar principles. The amount of RF energy emitted by the passive transponders is orders of magnitude greater than that which would be reflected back from the conductive surfaces contained within the golf ball by an impinging electro-magnetic wave. With our device, RF energy is emitted from the surface of the golf ball for hundreds of nanoseconds after the RF energy from the transmitter is no longer striking the surface of the ball. Therefore, the emissions~~

~~are not radar, since radar emissions from a target stop as soon as the energy from the radar transmitter is shut off.~~

Delete the paragraph beginning at line 8 on page 8 in its entirety:

~~The present invention possesses several advantages over the prior art. The passive array incorporated in the golf ball of the present invention contains no conventional electronic components and is therefore impervious to the impact loading produced by hitting a golf ball during the normal course of play. Further, the signal emitted by the passive array is omni-directional and therefore detectable by the transmitter/receiver regardless of the orientation of the golf ball on the course. Also, the present invention can detect a golf ball incorporating the passive array regardless of whether the ball is obscured by foliage. In addition, the RF transmitter/receiver of the present invention possesses sufficient transmitter power to provide an effective range of at least 100 feet, yet power consumption is sufficiently low such that the transponder/receiver can be operated with ordinary dry cell batteries. Other features and advantages of the invention will become apparent from the following detailed description.~~